

Station 175 Response

Transcontinental Gas Pipe Line Corporation (Transco) has reviewed comments from US EPA seeking assurance that the proposed Station 175 compliance plan does not produce a situation where Transco complies with NO_x SIP Call Phase II reductions through load shifting. As detailed below, Station 175's compliance with the ozone season (May 1 through September 30) NO_x tonnage limit is not achieved through simply shifting ozone season emissions to uncontrolled engines. Station 175's compliance with the ozone season NO_x reductions are achieved through imposition of a federally enforceable ozone season NO_x tonnage limit on the facility's mainline compressor engines. Transco is able to comply with this ozone season NO_x tonnage limit due to projected reduced utilization rates for the Station 175 engines. Based on Station 175 historic operations, Transco projects that the reduced utilization of these engines will allow future compliance with an ozone season NO_x tonnage limit. Further, should Station 175 utilization rates increase, Transco is prepared to either install Low Emission Control (LEC) technology on these engines or replace these engines with lower emitting units.

To further assist the Department in addressing US EPA's concerns, Transco provides the following information.

- Ozone season load shifting cannot occur at Station 175 as all four mainline compressor engines are "large" engines as defined by the NO_x SIP Call and are included in the proposed ozone season NO_x tonnage limit.
- Load shifting from Station 175 to other compressor facilities is not practicable as the hydrodynamics of pipeline operation require recompression at specific points along the pipeline to overcome pressure losses created by pipeline friction and gas deliveries. Arbitrarily shutting in a station is not feasible or economic as pressure losses through that section of pipeline could create situations where pipeline pressures fall below serviceable levels.
- Station 175 historic operations demonstrate that the facility has not operated significantly during the last five consecutive ozone seasons (see Attachment A, "Ozone Season Utilization"). A review of ozone season operational data for Station 175 and adjacent compressor stations (Station 170 and Station 180) indicate utilization has fallen off during this period for all three facilities. Further, Station 175 utilization trends along a similar curve as the adjacent stations but at a significantly lower utilization rate. Note that 1995 ozone season operating data demonstrate that utilization at the adjacent facilities – Station 170 and Station 180 – was approximately 85% and 75% respectively, while the Station 175 utilization rate during the 1995 ozone season was approximately 10%. As shown, the adjacent stations operate at a much higher utilization rate than Station 175 for all years examined. The spread in utilization rates is expected, as Station 175 was constructed as an intermediate facility to ensure that Transco could meet peak winter deliveries. Station 175 was constructed in 1960, approximately ten years

after construction of Station 170 and Station 180. Today, Station 175 continues to operate in a manner consistent with an intermediate facility, operating during periods of higher demand while the adjacent stations operate more as base load facilities. Station 175's historic ozone season operations demonstrate that due to the peaking nature of its operation, load shifting does not occur.

- Transco seeks a permit that caps ozone season NOx emissions from Station 175's mainline compressor engines to a tonnage limit based on the budget set forth by the NOx SIP Call. Transco will continue to operate Station 175 at a utilization rate that would meet the ozone season NOx tonnage limit. If required in the future, Transco is prepared to install LEC technology on these engines or replace these engines with lower emitting units to ensure compliance with the ozone season NOx tonnage limit.
- Transco is the most affected company under the NOx SIP Call Phase II. Transco has spent approximately \$200 million in its efforts to meet the required ozone season NOx reduction requirements at compressor stations located in Alabama, Georgia, South Carolina, North Carolina, Virginia, Pennsylvania, and Maryland. NOx SIP Call Phase II directly affects 74 of Transco's "large" IC engines. To ensure compliance with the NOx SIP Call, Transco will reduce NOx emissions from 82 of its IC engines through retrofitting the engines with LEC technology. Given Transco's exposure to the NOx SIP Call, the time required to install LEC technology and the desire to achieve a sufficient margin of compliance throughout the ozone season, Transco has proven that it approaches the NOx SIP Call consistent with the intent of the Rule. As part of its NOx SIP Call implementation strategy, Transco pursued ozone season tonnage limits based on ozone season potential emissions. In other words, Transco did not base control strategies on the utilization factors used to determine the 1995 NOx SIP Call budget, thus establishing an additional compliance margin for stations located within these states. As a result, Transco has taken steps to reduce ozone season NOx emissions to an extent that the company's facilities are essentially over-complying with the NOx SIP Call reduction requirements.

In summary, the existing four uncontrolled "large" IC engines at Station 175 have an extremely low utilization rate. Transco requested an ozone season NOx tonnage limit on Station 175's mainline compressor engines based on an economic value-added principle. The company/investor return on spending a significant amount of dollars to retrofit four engines that may have little to no ozone season service does not make good business sense. Transco enters into the proposed Station 175 ozone season NOx tonnage limit with the understanding that should Transco require increased utilization at Station 175, Transco will either equip the existing mainline compressor engines with LEC technology or replace them with lower emitting units in order to maintain compliance with the Station 175 ozone season NOx tonnage limit.

Attachment A

